



2009 Marine Cargo Forecast

*a joint project by the Washington Public Ports Association and the
Washington State Department of Transportation*

Washington State Transportation Commission
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Marine Cargo Forecast Background

Conducted by :

- BST Associates in conjunction with IHS Global Insight and Mainline Management

Marine cargo forecasts are:

- Unconstrained relative to infrastructure capacity
- Evaluated for modal split (truck, rail, barge)
- Used in port and state facility and policy plans



MCF Key Findings



- Waterborne cargo expected to increase by 37% by 2030
 - Puget Sound at 2.2 % increase per year
 - Lower Columbia at 2.1 % increase per year
- Major Trading Partners
 - China, Japan, South Korea, Taiwan, SE Asia
 - Asia accounts for more than 90% of containerized trade and about 70% of non-containerized trade

MCF Key Findings *(cont'd)*



- **Containers are still the fastest growing cargo type.** Puget Sound containerized trade is projected to reach 9.7 million TEUs in 2030, an average annual growth rate of 4.1 percent over the forecast period.



- **Fully assembled autos will exhibit rapid growth.** Auto imports are expected to grow to approximately 1.5 million units in 2030.



- **Log exports will level off.** Log exports are expected to level off and remain flat through the forecast period.

- **Breakbulk cargo volumes will grow slowly.** Breakbulk traffic through Washington ports is projected at around 3.0 million metric tons in 2030.

MCF Key Findings *(cont'd)*



- **Grain shipments will expand.** Grain shipments will grow modestly in the face of significant domestic and international competition.



- **Dry bulk trends will continue.** Some stalwart cargoes (such as alumina) have decreased while others (such as petroleum coke) have increased. These trends will continue.



- **Liquid bulk will shift from domestic to foreign.** Both crude oil and petroleum products will shift from domestic to foreign sources as Alaskan production tapers off.

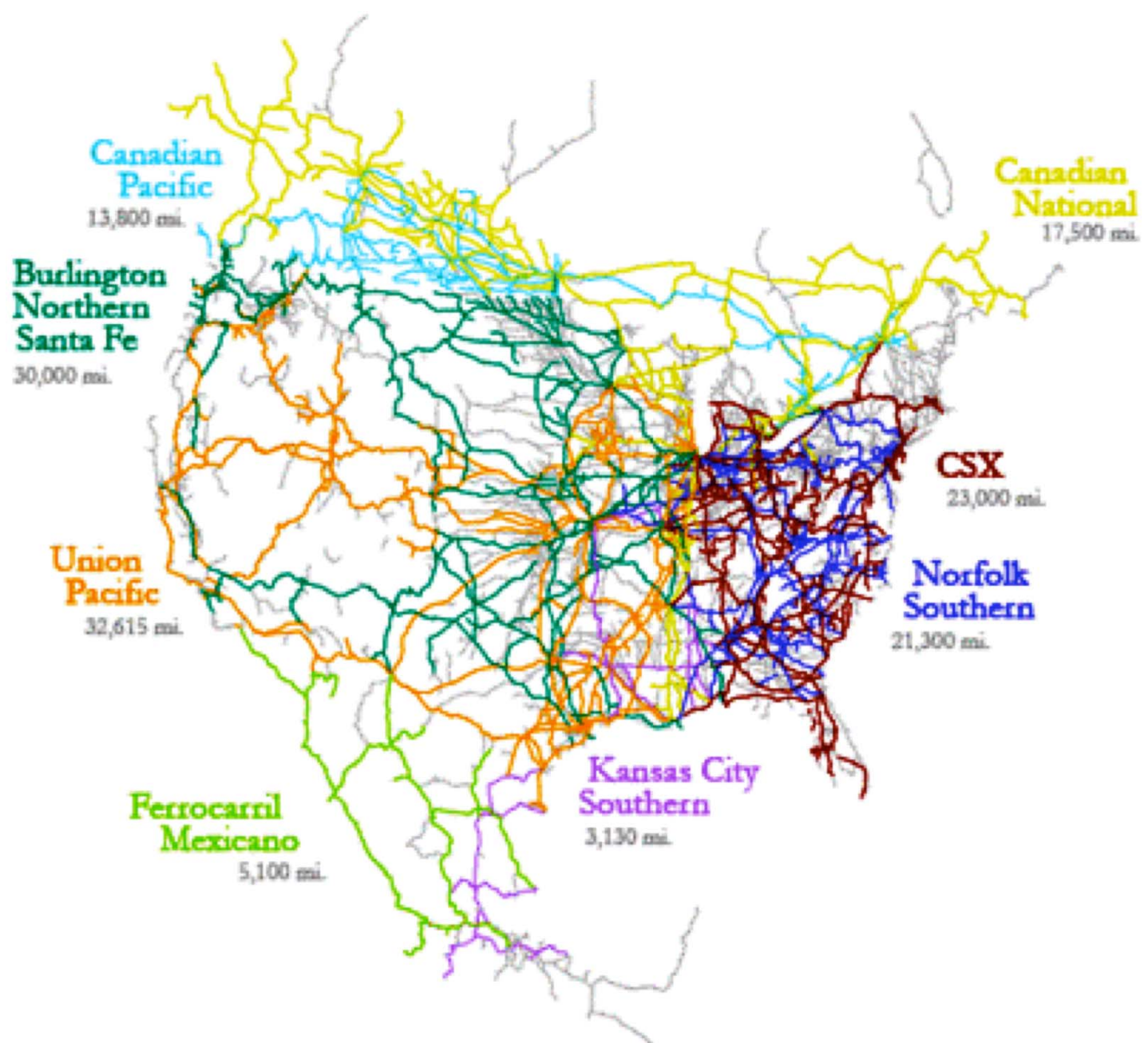
Rail Capacity Study Background



The rail system capacity component of the study was prepared by BST Associates with assistance from Mainline Management

Key elements include:

- Analysis of mainline capacity throughout the state
- Overview of rail trends in Washington
- Strategic issues at other continental gateways



Rail Study Key Findings



Projected growth through 2030 for all train types will put significant pressure on the rail network in the PNW and on the ports' ability to efficiently handle growing volumes of traffic

- Chokepoints on primary main line corridor segments will not be able to handle the total volume of train traffic under current operating and routing parameters
- Port and terminal operations will become increasingly congested and inefficient as a result of conflicts with growing volumes of other mainline trains – passenger and freight

Rail Study Key Findings *(cont'd)*



In the short-term, operational and minimal capital investment options are available to improve port/rail efficiency in terminal areas, for example:



- Vancouver, Washington Freight Rail Bypass.
- Point Defiance Bypass from Tacoma to Nisqually.
- Partial third main line from Kalama to Kelso.
- Port of Vancouver USA West Freight Access Project.
- Siding extensions at Mount Vernon and Stanwood, new siding at Swift.
- Blakeslee Junction at Centralia.
- High Speed Crossover Plan from Nisqually to Centralia.
- East Marginal Way Grade Separation and Duwamish Rail Corridor at Seattle.
- Bullfrog Junction Realignment at Tacoma.



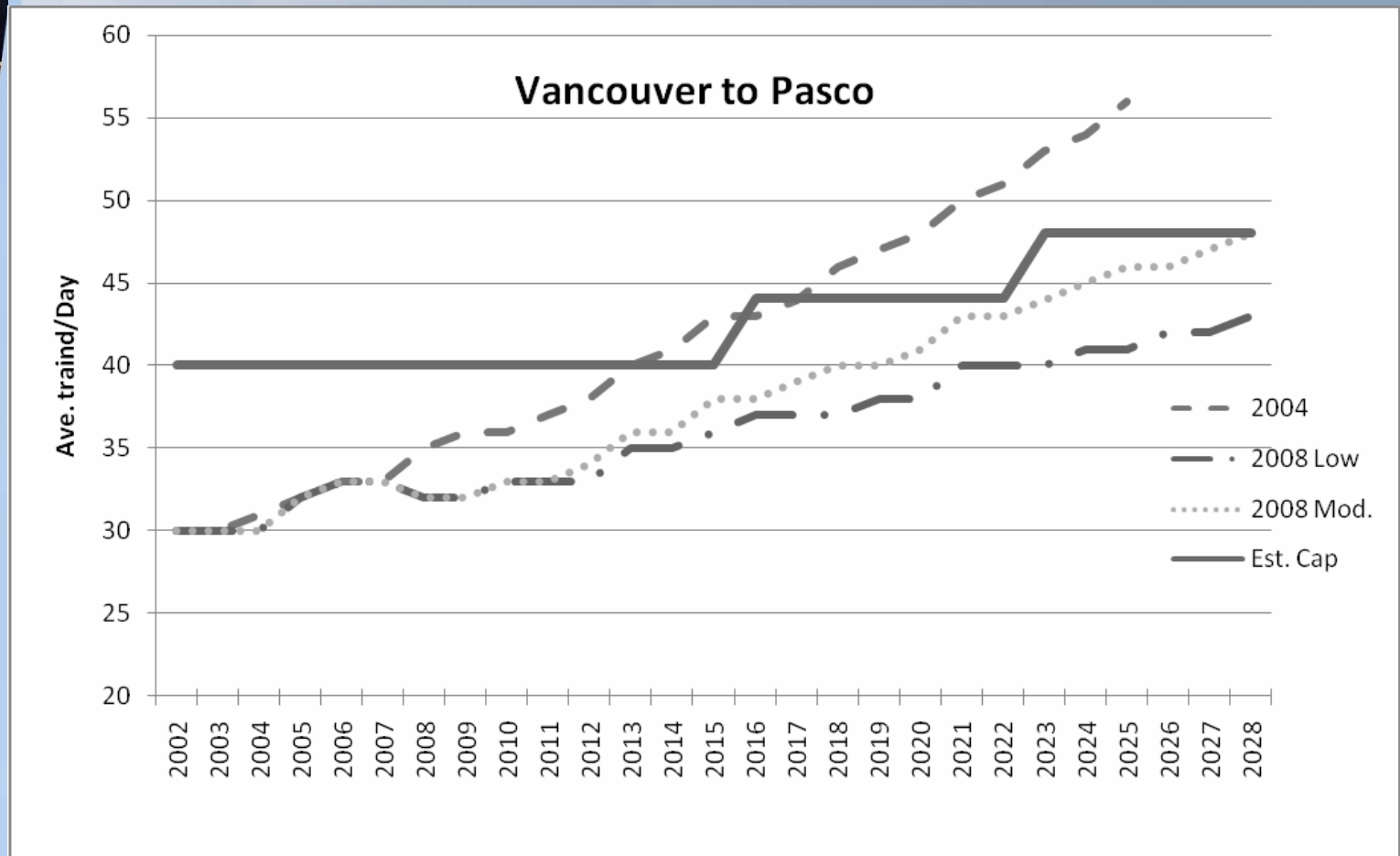
Rail Study Key Findings *(cont'd)*



In the longer-term, significant and expansive operating and capital investment initiatives will be required to ensure that Washington ports are able to realize their growth potential, for example:

- Construction of a third line to the full extent between Martin's Bluff and Rocky Point along the Kelso-Vancouver (WA) route.
- Clearing of Stampede Pass to accommodate double-stack rail cars.
- Construction of an Ellensburg-Lind "cutoff" along the old Milwaukee Road corridor.

Rail Corridor Capacity - Vancouver to Pasco BNSF



Challenges



- Access and Capacity
 - Channel deepening, maintenance dredging, dam breaching
 - Highway congestion/condition
 - Rail infrastructure
- Competition
 - Canada – Vancouver and Prince Rupert
 - Panama Canal – triples in size in five years
 - Mexican ports – Punta Colonet
 - California – Oakland, Los Angeles & Long Beach

Final Comments



- Washington is poised to continue and strengthen its role as a major gateway for international and domestic trade
- Investment in our state's transportation network will enable the projected cargo growth to bring thousands of jobs and greater opportunity to all Washingtonians.